- 16. (New) The bracket of claim 12, wherein the bearings are formed from metal.
- 17. (New) The bracket of claim 11, wherein the ring is formed from plastic.
- 18. (New) A retrofit kit for securing an acoustical speaker of a predetermined size relative to an enclosure, comprising:

## a bracket comprising:

a ring comprising an outer portion, an inner portion, and a channel therebetween;

a plurality of bearings disposed within the channel, wherein the inner portion is rotatable relative to the outer portion;

a first securing portion disposed on the inner portion, the first securing portion being adapted to secure the acoustical speaker to the inner portion; and

a second securing portion, the second securing portion being adapted to secure the ring to the enclosure; and

a means for securing the bracket to the enclosure.

#### REMARKS

In view of the preceding amendments and the following comments, and pursuant to 37 C.F.R. §1.111, amendment and reconsideration of the Official Action of April 19, 2006 is respectfully requested by Applicant.

# Objections; Rejections under 35 U.S.C. § 112

The pending objections and rejections under 35 U.S.C. § 112 have been obviated by appropriate amendment.

# Rejection under 35 U.S.C. § 103

Pending claims 10-18 are directed to a bracket for supporting an acoustical speaker relative to an enclosure. In particular, the bracket includes

a ring having two portions having a channel therebetween and bearings provided within the channel. In addition, the two portions are rotatable in relation to one another. The ring further includes a pair of securing portions, which are for securing the speaker to the ring and the ring to the enclosure.

The Examiner rejected claims 1-9 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,960,095 ("Chang") in view of U.S. Patent No. 4,015,884 ("Bertram"). Chang relates to a loudspeaker having adjustable directivity. In particular, Chang describes a loudspeaker having a universal joint connection and a spherical surface that allows a user to rotate the loudspeaker "to a desired position and thus adjust the directivity of the loudspeaker 20." Chang, col. 2, II. 46-48. Bertram relates to a center-free wire ball bearing.

The Applicant respectfully submits that there is no motivation to combine Chang and Bertram. To the contrary, the combined references *teach away* from the present invention. The Federal Circuit has held that:

if references taken in combination would produce a seemingly inoperative device, such references teach away from the combination and thus cannot serve as predicates for a prima facie case of obviousness.

McGinley v. Franklin Sports, Inc., 262 F.3d 1339 (Fed. Cir. 2001) (internal citations omitted); In re Sponnoble, 405 F.2d 578, 587 (C.C.P.A. 1969)(references teach away from combination if combination produces seemingly inoperative device).

Here, the proposed combination of Chang and Bertram would result in a loudspeaker that cannot be moved to adjust the *directivity* of the loudspeaker. In particular, the Bertram device would secure the loudspeaker to the base and would not allow the loudspeaker to adjust directionally relative to the universal joint. This renders the cited Chang reference inoperable for its intended purpose, which is allowing a user to adjust the direction of the loudspeaker. As a result, Applicant submits that the cited references cannot

serve as predicates for a prima facia case of obviousness under 35 U.S.C. §103(a).

Accordingly, Applicants respectfully traverse the rejections based on the cited references.

#### CONCLUSION

In view of the above amendments and remarks, new claims 10-18 are in condition for allowance. If any issues remain, Applicant requests that the Examiner call the undersigned to expedite the prosecution of this application.

Dated: September 19, 2006

Respectfully submitted,

yejandro J. Fernandez

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Patent
Our Case No. E43960-110567

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE APPLICATION FOR UNITED STATES LETTERS PATENT

INVENTORS: Nicholas Edwin

TITLE: GYRATING ACOUSTICAL BEARING

**BRACKET** 

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## GYRATING ACOUSTICAL BEARING BRACKET

## **BACKGROUND**

[0001] 1. Technical Field

[0002] The present invention relates to acoustical speaker brackets and systems.

[0003] 2. Background Information

[0004] Since the first speaker invention, innovative designs have been made to maximize sound reproduction. In <a href="mailto:the-1920">the-1920</a>'s, Chester W. Rice and Edward Washburn <a href="mailto:patented-the-patented-a-new-prominent-design-for-speakers-which-that-incorporated the moving coil and direct radiator. The speakers were sold to the public <a href="mailto:byunder-the-trade-name">byunder the trade-name</a> "Radiola". <a href="Within-In-its-period-of-time">Within-In-its-period-of-time</a>, its sound <a href="mailto:reproduced-reproduction-quality">reproduction-quality</a> was superior to anything previously invented. The unique design <a href="mailto:lessenses-lessened-distortion-and-enhanced-audio-quality">lessens-lessened-distortion-and-enhanced-audio-quality</a>.

[0005] Other exemplary designs have been made to Subwoofers, Woofers including subwoofers, woofers, tweeters, and midrange speakers.

Better Other improvements have included better cooling designs, improved magnets, higher wattage handling, and stronger, more rigid materials. All these combinational and exploits These combinations in the filed have enable enabled higher fidelity audio reproduction and listening pleasures.

[0006] Another integral part of this design is ball bearings The history of ball bearings is relevant to the present background. Many dramatic advances have been accomplished throughout history on the ball bearing. Different ball bearings have been designed to accomplish many different tasks. Weight, rotations per minute ("RPM"), and lubrication, have all been so precisely engineered to accomplish any giving task needed. many tasks.

[0007] The Ball bearing too has evolved. Then in In 1844 the invention of the BALL-BEARING wheels made these two contraptions glide easier causing little to no friction. Since Sven Wingquist created the self-aligning ball bearing in 1907, worldwide, new developments in use, and various applications can be employed. In the early 1700's, a Dutchman nailed wooded spools to strips of wood and attached them to his shoes. Later in 1863, James Plimpton added maneuverability to the innovation and updated the land skates.

[0008] The "Gyrating Acoustical Ball Bearing" as described uses a combination of modern innovations to achieve and optimize its use. <u>U. S.</u> Patent Number 6,374,942 to Huggins, describes a system for a combined rotatable and electrical speaker mounting system. This system allows the positioning and re-positioning of a speaker system with full rotational motion of the speaker to direct aim without severing the electrical connection. Huggins speaker assembly is configured for a speaker that suffers from directionality and sound distance attenuation limitations. Huggins speaker assembly is configured with a mechanical mounting mechanism and configured to establish an electrical connection between the speaker and the enclosure. Although Huggins speaker system allows rotation, its rotation is based on fixture like enclosure that is manually rotated and locked to better disburse sounds downward in home audio systems. His invention also consists of cylindrical members configured to axially and concentrically couple with one another. This allows the speaker to have a full range of motion, i.e. when adjusted by user with respect to the enclosure to be adjusted without using tools to disassemble and rewire the system. But this system is complex and cannot be adapted quickly into an existing car audio speaker system, especially with off the shelf components. The method used to achieve this rotation is bearing brackets. These brackets that can be

applied to any existing speaker device. These brackets, since they contain bearings, both cylindrical or ball bearing, or a combination of therefore can provide a frictionless environment for the speaker to gyrate while being played or in a rest state position, on its or axis or bracket ring. The existing device will have quick setups and a complete compatibility on any acoustic suspension systems or bass reflex speaker systems. Any of these enclosures will not interrupt with its intent. Thus the gyrating speaker apparatus ads free movement but non-interference with calculated specs designed for a system. The resulting structure provides a higher efficiency in movement but not depreciation in quality caused by an steady bracing of the speaker.

[0009] In this case the brackets can essentially provide aesthetics as well as efficiency due to it gyrating waveforms produce enhancing vocal ambiance and a multi directional flow of acoustics an every given degree. Agitation by more power being added to the speaker system will aid in Its 360-degree self-rotation. Thus cresting more rapid rotation using kinetic energy generated by the speaker. This device can especially be used in smaller environments (ex. Automotive) where a multi-timbrel effect as well as aesthetically pleasing facial is needed in a limited space.

<u>[0010]</u> <u>[0008]</u> U. S. Patent Number 6,374,942 to Huggins, a patent that provides a system for a combined rotable and electrical speaker mounting system. This system allows the positioning and re-positioning of a speaker system with full rotational motion of the speaker to direct aim without severing the electrical connection. Huggins speaker assembly is configured for a speaker that suffers from directionality and sound distance attenuation limitations. Huggins speaker assembly is configured with a mechanical mounting mechanism and configured to establish an electrical connection between the speaker and the enclosure. Although Huggins speaker system

allows rotation, its rotation is based on fixture like enclosure that is manually rotated and locked to better disburses sounds downward. His invention also consists of a cylindrical members that is configured to axially concentrically couple with one another, which allows the speaker to have a full range of motion (i.e. when adjusted by user)with respect to the enclosure to be adjusted without using tools to disassemble and rewire the system. But this system is complex and cannot be adapted quickly into an existing car audio speaker system, especially with off the shelf components. His speaker apparatus also allows for full directional aiming of the speaker due to the electrical connections and the mechanical connections being independent.

#### **BRIEF SUMMARY**

Device is neither an aiming apparatus nor a speaker recesses in and/or fixture like, lighting enclosure system. Nor thus this device incorporates any electrical connections to the proposed enclosure/speaker. Thus not needing independent mechanical and electrical members. Thus the "Gyrating Acoustical Bearing Bracket" uses ring strips that mount to the underside of a speaker, to allow impulse driven sporadic movements. Therefore the industry needs a quick, simple, thin, rigid add-on bracket that can be installed on any existing and/or pre-developed system, which uses bearings brackets to house a combination of one or more speaker units. When agitation is generated by kinetic energy from the speaker vibrations, a gyration or a swinging like motion performance occurs on its axis, due to powered being exerted through stereo system and/or amplifiers. The more power output by stereo/amplification, into the speaker placed inside the bearing brackets, the more gyrations increase in angular degrees

made in the field of acoustical [00091 Disclosed is An advance is speakers by a gyrating acoustical bearing bracket. The presently disclosed device includes bearing rings designed to mount between an acoustical sound speaker and an enclosure or other structure. This configuration allows the acoustical sound speaker to use kinetic energy to gyrate freely. The present invention is ideally suited for use with a stereo or as an add-on unit or in a pre-installed setup. Each bracket can accommodate one or more speakers depending on the bracket's interior diameter (I.D. - see drawing I) size and the speaker's exterior diameter (E.D. - see drawing I) size. Each bracket can be used solely or as a multi-setup display or a combination of multiple setups and adjoining configurations for speakers.

In one embodiment, the brackets are placed in an enclosure [0010] adapted and configured for that particular speaker system where number in volume sizes, port sizes, recessed and or channelized designs, have already been pre-configured.

[0012] — The gyrating bracket shape is well-suited to almost any existing speaker container or enclosure. The Interior Diameter ("I.D.") of the bracket is sized so that it is compatible with a wide variety of standard-sized speaker systems. When the exterior diameter of a device composed of bearings rings designed to mount between an acoustical sound speaker and an enclosure or structure, allowing it to use kinetic energy to gyrate freely. Designed for a stereo purpose as an add-on unit or pre-installed setup. Each bracket can accommodate one or more speakers depending on interior diameter (I.D. see drawing I) size and speaker exterior diameter (E.D. - see drawing I) size. Each bracket can be used solely in part as a muti-setup display or a combination of multiple setups and adjoining configurations for speakers. [0013] An ideal installation is preferred where the brackets are placed in an

enclosure adapted and configure for that particular speaker system. Where in

volume sizes, port sizes, recessed and or channelized designs, have already been pre-configured.

[0014] The gyrating bracket shape helps in becoming well suited to almost any exiting speaker container. The Interior Diameter (I.D. – see drawings I) being the size of most standard sized speaker system makes it very compatible. The exterior diameter a little bigger than the interior diameter (I.D. – see drawings I) of the bracket, this allows firm bracketing to the enclosure allowing adequate suspension for the excess load excessively loads of a moving and thereby vibrating speaker.

<u>[0015]</u> The gyrating brackets further provide <u>an</u> enhanced speaker functionality effect that prior or typical rigid adaptation did not provide. This is accomplished by allowing the speaker to gyrate <del>on its own reconnaissance.</del> Free gyrating functionality disallows any suppression encompassed by rigid brackets therefore improving acoustic presence <u>or performance</u>.

[0013] The unveil apparatus is presently disclosed brackets can perform with an performing acoustic replicator of any design bracketed within the circular ring having an interior diameter (I.D. – see drawing I) of the same or smaller inner bracket, facing away at one end and which then is secured inside another circular ring separated by bearings, which is then bracketed on a cabinet enclosure via any fastening device. The inner circular ring bears another opening, which is used to house a speaker unit(s). This opening typically resembles a circular from form, but can be configured to any shape or form to co-exist on any irregular manufactured speaker system.

<u>[0016]</u> The exterior surface of the inner circular ring contains a notch running parallel to the face of the ring or circumscribed along its outer diameter. This notch bears a bearing, which allows a channelized path for the bearing to glide around its perimeter. Another notch is placed on the surface

of the outer circular ring running parallel to the perimeter of the ring or inscribed along its inner diameter. Again this notch allows free play between outer interior bracket and the exterior bracket. The outer circular ring, brackets to a cabinet (or any variation) enclosure via any fastening device. When completely installed the structure provides the speaker with self inflictingautomatic gyrating swings inalong its axis, when the speaker is in use. More variable rotations may be achieved by applying more power to the system via amplifier or stereo outputs/inputs.

<u>[0017]</u> The <u>objection of this information is to reveal anpresent invention discloses</u> attachable bearing slip apparatus, which can be used on all pre-existing speaker systems <u>but this</u>. This bearing slip apparatus can be configured for new modules, to reproduce an <u>unmannedautomatic</u> variable rotational effect. Therefore already using provided, or thus to be provided, power consumption for acoustical device.

[0018] [0016] An additional objection of this device is to enhance aesthetics and visual looks due to its The present invention enhances aesthetics and visual looks of speaker equipment. This is because the present invention provides life\_like- dance motions, which occur inon a rhythmic manner as music is played.

<u>[0019]</u> <u>[0017]</u> An additional objection in this development The present invention is its ease to install and further facilitates installation by its compatibility to all existing systems. Any existing systems speakers speaker cabinets (or enclosures) can be fitted to the adapt to this brackets.

And brackets for the present invention, and thereby converted to a self-spinning acoustical system.

[0020] [0018] Another distinction in these brackets is to develop in uncomplicated systems that maximize a low frictional apparatus to execute

known gravitational variables. Thus foremost solely rely on stereo outputs / inputs and environmental gravitational changes to gyrate the speaker unit.

**[0021]** Manufacturing the present invention is simple due to its simple, and well used (in other applications) bearing brackets as one of its comprised components, which makes it aan inexpensive add on device.

[0022] These described devices, components, and objects will be detailed in a FIG. 1-8 and more description as well as explanation will be discussed about the drawing.

### BRIEF DESCRIPTION OF THE DRAWINGS

<u>[0023]</u> FIG. 1 shows the <u>illustrates a front view of the a bearing</u> bracket of <u>one embodiment of the present invention</u>.

[0024] [0021] FIG. 2 shows illustrates a cross section sectional side view of FIG. 1 the above mention of one embodiment of the present invention.

<u>[0025]</u> FIG. 3 <u>showsillustrates</u> a zoom in (close-up) view of FIG. 1 <u>encompassinghaving</u> a shaded surface representation <u>of one embodiment of</u> the present invention.

<u>[0026]</u> FIG. 4 shows illustrates a zoom in (close-up) view of FIG. 1 encompassing all hidden elements that can be seen from the rear view displayed from the front view of a surface scan <u>of one embodiment of the</u> present invention.

<u>[0027]</u> FIG. 5 <u>shows illustrates</u> an isometric representation of the speaker module to be encompassed in bearing bracket <u>of one embodiment of</u> the present invention.

<u>[0028]</u> FIG. 6 shows illustrates an isometric representation the bearing bracket apparatus that houses the speaker and mounts to the enclosure— of one embodiment of the present invention.

<del>[0029]</del> [0026] FIG. 7

shows illustrates an isometric

representation of a zoom in (close-up) view of FIG. 6 detailing the bearing and bracket configuration of one embodiment of the present invention.

<u>[0030]</u> FIG. 8 <u>showsillustrates</u> an isometric representation of both the speaker and bearing brackets assemblies <u>with exception of enclosureof</u> one embodiment of the present invention.

DETAILED DESCRIPTION OF THE DRAWINGS AND THE PRESENTLY PREFERRED EMBODIMENTS

<u>[0031]</u> The invention is described with reference to the drawings in which like elements are referred to by like numerals. The relationship and functioning of the various elements of this invention are better understood by the following detailed description. However, the embodiments of this invention as described below are by way of example only, and the invention is not limited to the embodiments illustrated in the drawings. It should also be understood that the drawings are not to scale and in certain instances details have been omitted, which are not necessary for an understanding of the present invention, such as conventional details of fabrication and assembly.

[0029] FIG. 1 shows the assembly of a bracket by means of the two circular rings surrounded by bearings, less the speaker adaptation containing the outer circular ring 1, and the inner circular ring 2. The "Gyrating Acoustical Ball Bearing" as described uses a combination of modern innovations to achieve and optimize its use. The method used to achieve this rotation is bearing brackets. The bearing brackets can be applied to any existing speaker device. These brackets, since they contain bearings, both cylindrical or ball bearing, or a combination thereof can provide a low-friction environment for a speaker to gyrate while being played or in a rest state position, on its or axis or bracket ring. The existing device provides for quick

setup and compatibility with many acoustic suspension systems or bass reflex speaker systems. Any of these enclosures are compatible with the present invention. Thus the gyrating speaker apparatus adds free movement without interfering with calculated specifications for a sound system. The resulting structure provides a higher efficiency in movement without depreciation in quality caused by steady bracing of the speaker.

The brackets provide enhanced aesthetics and efficiency as the brackets gyrate. This produces enhanced vocal ambiance and a multi-directional flow of acoustics. Agitation by more power being added to the speaker system will aid in its 360-degree self-rotation. This creates more rapid rotation using kinetic energy generated by the speaker. This device can be used especially in smaller environments (ex. Automotive) where a multi-timbrel effect as well as aesthetically pleasing setup is desirable in a limited space.

Turning now to the Figures, FIG. 1 shows a bracket assembly of having two circular rings surrounded by bearings, and in particular, outer circular ring 1, and the inner circular ring 2. The outer circular ring 1 has screw hole 3 that goes through the body allowing firm installation on to the enclosure. The inner circular ring 2 also has the has screw hole 4 that goes through the body allowing firm installation of the speaker device (shown in FIG. 5 to mount securely. 5) to the inner ring 2. This is made possible by the opening in 5 that is placed within the inner ring 2. This The opening in this figure is of the form of a circular diameter but can be any irregular or polygonal shape needed to encompass the acoustic replicator.

<u>[0033]</u> An alternate configuration can be achieved but not shown where the ring 1 can also be mounted behind ring 2, mirroring the entire internal assembly from an interior configuration to a rear arrangement. This

would imply that the channelized pathway that is currently shown on FIG. 7 callout (4,6) illustrated in FIG. 7 would now be shifted to back 5 of bracket shown in FIG. 7-callout (5). Also, in this embodiment, ball bearing 2 and interior ring 1 of FIG. 7 callout (2) and interior ring FIG 7 callout (1) would be placed to back of outer bracket FIG. 7-callout (5). of FIG. 7.

<u>[0034]</u> It is not necessary in the design of the invention that the hole **5** within the inner ring or the speaker be round, nor is it necessary that the inner circle of the inner ring house one speaker. Thus an alternate version is theoretically possible in which more than one speaker can be used in the internal ring as a multiple speaker combination or multiple speaker sizes.

FIG. 2 shows the cross sectional view of the assembly of the two rings by means of the two circular rings with bearing less speaker adaptation, the bearings. The outer cross sectional view or exterior diameter 1 (E.D.) can be clearly seen 1-on top of the interior ring having an interior diameter (I.D.) 2. They are separated by bearings 5 arranged in chanelized crevasses FIG. 4 callouts (2,chanels 2 and 3 (as illustrated in FIG. 4). The diameter of the outer ring 1 is calculated after the inner ring 2 is known. The inner ring 6 is calculated after the speaker size is anticipated allowing plus (+) inchesadditional space for the mounting screws and nuts. The bracket width 3 iscan be calculated after knowing the devices wattage and power handling capacity. A one-inch width will over accommodate an average subwoofer system, but will need adjustment to accommodate different handling loads, as will become apparent to a person of ordinary skill in the art in view of the present disclosure.

<u>[0036]</u> FIG. 3 shows a surface view zoom in section of FIG. 1 callout (6). This zoom in area. In particular, FIG. 3 shows the outer circular ring 1 and the inner circular ring 2. The outer circular ring 1 has screw hole 3 that goes through the body allowing firm installation ento the enclosure. The

inner circular ring **2** also has the screw hole **4** that goes through the body allowing firm installation of the speaker device of FIG. 5 to the inner ring **2**.

FIG. 4 shows a hidden surface view zoom in section of FIG. 1 callout (6). This zoom in area shows the hidden channelized guides that align the bearings 1 between the inner channel 3 and the outer channel 2, providing a smooth friction less movement between the two entities.

[0038] [0037] Bearing 1 size will directly relate to weight of speaker unit and system vibration foreseen that the outputs will reproduced. Total speaker wattage and load capacity will dictate a stretching of exterior diameter FIG. 2 callout (1), along with channelized areas 2,3 to increasing and accommodate

**[0039]** Bearing 1 quantity can be increased to also aid in the structural support and integrity needed to bind components securely.

larger more robust bearings 1.

different bearings or a combination of thereof. Cylindrical bearings can be used. AngularA wide variety of bearings can be used with the present bearing brackets. This includes cylindrical bearings, angular bearings ean be used, that are formed from metal, plastic, or other synthetic, bearings can also be used. materials. Any type or variation plus combination thereof can be substituted or implemented in this design. Metal This includes metal ball bearings, Plasticplastic ball bearings, linear ball bearings, needle roller bearings, thrust bearings, Pressedpressed bearings, Y-Bearings, Angularangular ball bearings, CARB toroidal roller bearings, Taper rolleror other bearings, etc that will become apparent to a person of ordinary skill in the art in view of the present disclosure.

<u>[0041]</u> FIG. 5 depicts an acoustical replicator, akalso referred to as a speaker module with various hole's **1** around the outer perimeter of the speaker. These allow firm bracketing on the interior bracket FIG. 6 callout (2) viaby nut and bolt assembly.

[0042] [0041] Speaker adaptation can vary from circle diameter modules, rectangular modules, triangular modules, and polygonal modules.

<u>[0043]</u> Speaker types can <u>me-be</u> retrofitted, <u>form-from</u> subwoofer assemblies to woofer assemblies, and or any other speaker console therefore.

[0044] [0043] Turning to FIG. 6, showing a complete bracket assembly comprised of all entities less speaker FIG. 5. The internal ring 2 is preferably a plastic or synthetic material, but can be modified per custom specification, which houses the speaker unit FIG. 5. Speaker. A speaker unit fits on front plane of said internal ring. Internal ring bears holes 5 that align with speaker holes 1 of FIG. 5 callout 1. With these aligned a nut and bolt assembly, which is not shown, can be accepted from face plane of speaker FIG. 5 through internal ring 5. The nut and bolt assembly, which is not shown, will slip through holes <u>1 (shown in FIG. 5 callout (1)</u> and enter holes on inner ring **5**. The nut will attach to bolt on the rear plane for ridged and firm placement on inner ring 2 front plane. After speaker unit FIG. 5 is in place, inner ring it-is surrounded by ball bearings 3. Bearings set primed The ball bearings are provided in channelized notches 4, 6 of FIG. 7 callout (4,6) along the outer perimeter of inner ring 2. Bearings Ball bearings 3 then fit along another channelized path along inner perimeter of outer ring 1. Outer ring 1 is preferably a plastic or synthetic material but can be modified per custom specification, these houses are. This housing is utilized to allow interior speaker to free flowmove based on its own kinetic energy generated by sound input /output. By outerOuter ring 1 being is firmly mounted with nut and bolt

assembly or screw type attachment which is not shown will slip through said hole's FIG. 5 on to the enclosure through holes 4 going through embodiment. Interior ring 2 and speaker unit FIG. 5 can sustain suspension by exploiting ball bearings 3 after being harbored in channelized notch which are in channels 2, 3 of FIG. 4 for support. MakingThis makes interior ring 2 operate on variable gyrating axis when power is applied to speaker.

<u>[0045]</u> FIG. 7 thus shows a zoom in area <u>6</u> of FIG. 6 callout (6) to better described <u>the</u> channelized interaction. Interior ring 1 is shown with channelized notch 4 where bearing 2 sits in a confined compartment. Beneath this arrangement lays outer ring 3, which also have a channelized notch 6, which then confines bearings 2 to stay aligned, and allows inner ring 1 to <u>free flowmove freely</u>.

<u>I0046]</u> <u>Joen The zoomed-in depiction of FIG. 7 allows a clearer view of how interaction will work for projected performance. But parts interact. Of course, individual components can be rearranged to work in a like manner. Channelized For example, channelized notches FIG. 7 callouts (4, 6) of FIG. 7 can be reverted moved to different planes of the bracket. For example channelized notches can be reverted moved to rear plane 5 and all other components follow in like manner. From Inner ring 1 being converted to front ring, channelized notch 4 being converted to channelized ring on the rear plane 5, bearings 2 being converted to bearing on rear plane 5, outer ring 3 being converted to rear ring on rear plane 5, as well as channelized ring 6 being converted to channelized ring on rear plane 5.</u>

<u>[0047]</u> FIG. 8 shows depiction of all component co-existing less enclosure environment. Image8 shows depiction of one embodiment of the present invention. FIG. 8 shows a complete bracket assembly comprised of all entities with speaker FIG. 5. The This includes the internal ring <u>2 of FIG.</u> 6 callout (2) that houses the speaker unit FIG. 5. The Speaker unit fits on front

Internal Also shown is an internal ring plane of said internal ring. bearshaving holes 5 FIG. 6 callout (5) that aligns with speaker holes FIG. 5 callout (1). FIG. 5. With these alignments a nut and bolt assembly can be accepted from face plane of speaker FIG. 5 callout (1) through internal bracket FIG 6 callout (5). The nut and bolt assembly, which is not shown, will slip through said holes FIG. 5 callout (1) of FIG. 5 and enter holes on inner ring 5 of FIG 6-callout (5). The nut, which is not shown, will attach attaches to bolt on the rear plane for ridged and firm placement on inner ring FIG. 6 callout (2) front plane. After speaker unit FIG. 5 is in place inner brackets is surrounded by bearings FIG. 6 callout (3). Bearings sit primed in channelized notches FIG. 7 callout (4,6) along the outer perimeter of inner ring FIG. 7 callout (1). Bearings FIG. 6 callout (3) then fits along another channelized path along inner perimeter of outer ring FIG. 7 callout (3). Inner ring FIG. As illustrated in FIG. 6-callout (, inner ring 2) housing is utilized to allow allows interior speaker to free flow on move by its own kinetic energy generated by sound input /output. By the The inner bracket FIG. 6 callout (2) being can be firmly mounted with nut and bolt assembly which is not shown or , screw type which is not shown or assembly, or other attachment which is not shown will slip through said hole's FIG. 5 callout (1) on enclosure through holes FIG. 6 callout (5) going through embodiment to the speaker. Interior bracket FIG. 6 callout (2) and speaker unit FIG. 5 can sustain suspension by using exploiting bearings FIG. 6 callout (3) being harbored 2 in channelized notch 6 for support. Making interior ring FIG. 6 callout (2) operate on variable gyrating axis when power is applied to speaker.

<u>[0048]</u> <u>[0047]</u> <u>"Less enclosure" means less embodiment</u> elese <u>"Enclosure" includes closed</u> or open, synthetic or wooded housing. Per detail description above, much emphasis was not made on enclosure type, size or shape. <u>Since because</u> the gyrating bracket is made as an add-on supplemental kit. Mention to enclosure type has no impact.

Meaning bracket can be added on to any existing or new Therefore, the presently disclosed speaker bracket can be used with a wide variety of enclosures to achieve of different sizes and shapes while achieving kinetic movements form the speaker when amplification or typical stereo system applies power.

<u>F00491</u> Environment was also not taken into account due to bracket being an add-on supplemental kit. <u>Meaning This means that</u> enclosure calculations is are not needed on pre-existing speaker-to-<u>/</u>enclosure systems. And after already calculated enclosure specs on new systems have been calculated then <u>adaptationthe kit</u> installation can begin.

Figure 100491 Kinetic energy has been stated meaning generally means power or force exerted to speaker system thus that allows the speaker, woofer, sub-woofer, or any acoustical replicator to vibrate. Vibration then allows unit to spin or be agitated in a life like form when music is played being that and bearings allows allow the speaker to move.

[0051] Acoustical replicator has been generated throughout patent describes, and specifications. Acoustical replicator generally means speaker unit, or any speaker unit that generates audio sounds via electronic signals processed and reproduces as known as sound.

[0052] While this invention has been described expressively above. With said attachments and configurations, it is to be unwritten that the invention is not limited to the exact descript, but is anticipated to cover assorted modifications, variations and or similar concepts within the span of the appended claims.

[0053] [0051] It is therefore intended that the foregoing detailed description be regarded as illustrative rather than limiting, and that it be

understood that it is the following — claims, including all equivalents, that are intended to define the spirit and scope of this invention.

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I claim:

1. An attachable bearing bracket inserted into any open or closed enclosure, allowing a sound replicator and or speaker to gyrate freely around its circumference/inner perimeter that consist of:

An outer circular ring having a channelized spherical notch;

Ball bearings that reside in the said notch;

An inner circular ring having a notch that resided inscribed in the circle to said outer ring;

Ball bearing placed between said outer and inner rings;

Spherical balls provide a friction free environment for gyrating said inner ring;

The combination of said inner and outer circular rings comprise into functional bracket;

2. Apparatus as described in claim one above further comprising:

Said acoustical replicator defines a top face or front of said bracket;

Said front or top face brackets adjoins said inner circular ring;

An acoustical replicator fastens in

\_19 said inner circular gyrating ring;

- 3. The mechanism as described in claim two above encompasses the adding of mounts on a pre-existing or proposed design application.
- 4. The device as described in claim one above wherein said outer circular ring and said ball bearings and said inner circular ring and with but not obligatory said acoustical replicator, have a gyrating disposition on any gyrating degrees.
- 5. The mechanism as described in claim one above provided unregulated variable rotations on its axis from its environment.
- 6. The combinational effort reproduced, allows sound waves to gyrate sporadically outwards towards its destine.
- 7. The combinational effort reproduced, allows sound waves to gyrate sporadically outwards towards its kinetic energy.
- 8. The bracketed said sound replicator can thus be gyrated more rapidly through kinetic energy absorbed through enclosure.
- 9. Said unregulated variable rotations disposes said waves to enhance sound effects.

#### ABSTRACT OF THE DISCLOSURE

A bracket lying on a bearing is shown, for providing audio sound through a wave replicating device or module, which gyrates when power is applied to speaker. An audio transcender is mounted on a face similar to a bearing device, which then can be installed and or placed on any open or closed enclosure. These rotating brackets provide any speaker like device to produce acoustical sounds then being gyrated on its axis. The bracket then suspends the speaker and allows pre-bracket performance to occur. The bearings mounts consist of two structures. The outer bracket structure, which houses the combined device to any existing to proposed enclosure and the Inner structure which assemblies via cylindrical bearings and or ball bearing to the outer bracket structure. The two circular structures combined, allows any attached speaker or audio producing device to spin and/or gyrate in a variation of or equal to three hundred sixty degrees rotations. The finally is unison of the two structures as one that provides rotation. The effect is to allow a gyrating conductor within the fastened receptacle similar to brackets to perform.